

# CompTIA Security+ SY0-701

## 100 Questions & Answers

*Welcome to your complete Security+ SY0-701 **practice questions** collection.*  
*This set is designed not just for testing — but also to teach, strengthen, and deepen your*  
***real exam readiness.***



## Learning Objectives and Expectations

You'll get:

- Real-world style questions, modeled after CompTIA exam wording.
- Formatted by **10 questions then 10 answers** to quickly verify yourself.
- Short explanations clarifying correct answers and reinforcing key points.

## Security+ SY0-701 Domains

Each domain is weighted differently on the exam, with Security Operations being the largest:

- Domain 1: General Security Concepts (12%)
- Domain 2: Threats, Vulnerabilities, and Mitigations (22%)
- Domain 3: Security Architecture (18%)
- Domain 4: Security Operations (28%)
- Domain 5: Security Program Management and Oversight (20%)

## Quick Reminder: How the Exam Works

- Number of Questions: Up to 90
- Format: Multiple choice + Performance-Based Questions (PBQs)
- Time Limit: 90 minutes
- Passing Score: 750/900 (about 83%)
- Test Provider: Pearson VUE (onsite or online)

## Questions By Domain

Domain	Title	Questions Assigned	Question Numbers
Domain 1	General Security Concepts (12%)	<b>12 Questions</b>	Q1–4, Q24, Q31, Q44–45, Q53, Q78, Q91, Q93
Domain 2	Threats, Vulnerabilities, and Mitigations (22%)	<b>22 Questions</b>	Q2–3, Q8–9, Q11–13, Q19, Q28–29, Q36, Q40, Q46, Q49, Q54, Q58, Q61, Q68, Q69, Q76, Q79, Q96
Domain 3	Security Architecture (18%)	<b>18 Questions</b>	Q5–7, Q14–15, Q18, Q22, Q26–27, Q32, Q35, Q42, Q47–48, Q55, Q66, Q77, Q80
Domain 4	Security Operations (28%)	<b>28 Questions</b>	Q10, Q16–17, Q20–21, Q23, Q25, Q30, Q33–34, Q37–39, Q41, Q43, Q50, Q52, Q57, Q60, Q63–64, Q70, Q73, Q81–82, Q87, Q90
Domain 5	Security Program Management and Oversight (20%)	<b>20 Questions</b>	Q35, Q51, Q56, Q59, Q62, Q65, Q67, Q71–72, Q74–75, Q83, Q85–86, Q88–89, Q92, Q94–95, Q97, Q99–100

## Remember — you don't need to be perfect to pass!

The Security+ passing score is about **83%**. That means you **can miss around 15–16 questions out of 90** and still pass!

Missing a few tricky questions won't ruin your chances — **stay calm**, trust your preparation, and keep moving forward.

# Questions 1–10

## Q1.

Which of the following ensures that a sender cannot deny sending a message?

- A) Encryption
  - B) Hashing
  - C) Digital Signature
  - D) Symmetric Key Exchange
- 

**Q2.** Which type of threat actor is MOST likely to have the greatest resources and patience for an extended attack?

- A) Insider
  - B) Nation-State
  - C) Script Kiddie
  - D) Hacktivist
- 

## Q3.

What type of attack involves inserting malicious code into a legitimate web application to steal information from users?

- A) Phishing
  - B) SQL Injection
  - C) Cross-Site Scripting (XSS)
  - D) DNS Spoofing
- 

## Q4.

A company needs to prevent unauthorized devices from connecting to its internal network. What technology should be used?

- A) Firewall
  - B) VPN
  - C) NAC (Network Access Control)
  - D) IDS
-

**Q5.**

Which backup type saves only the changes made since the last full backup?

- A) Incremental
  - B) Differential
  - C) Full
  - D) Snapshot
- 

**Q6.**

What control type is a biometric fingerprint scanner?

- A) Technical
  - B) Administrative
  - C) Physical
  - D) Compensating
- 

**Q7.**

Which wireless security protocol is the most secure for corporate environments?

- A) WEP
  - B) WPA
  - C) WPA2-PSK
  - D) WPA3-Enterprise
- 

**Q8.**

Which of the following would BEST help mitigate risks associated with phishing attacks?

- A) IDS
  - B) Security Awareness Training
  - C) Firewall Rules
  - D) Password Complexity Requirements
- 

**Q9.**

Which risk response involves buying cyber insurance?

- A) Accept
- B) Mitigate

- C) Transfer
  - D) Avoid
- 

**Q10.**

Which concept is being applied when access to files is based on job roles such as HR, IT, or Accounting?

- A) MAC
  - B) DAC
  - C) RBAC
  - D) ABAC
- 

## Answers 1–10

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**A1.**

**Answer:** C) Digital Signature

**Explanation:**

Digital signatures ensure non-repudiation — proving who sent the data.

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**A2.**

**Answer:** B) Nation-State

**Explanation:**

Nation-state actors have the highest resources, skills, and patience for prolonged attacks.

---

**A3.**

**Answer:** C) Cross-Site Scripting (XSS)

**Explanation:**

XSS injects malicious scripts into web apps to steal session cookies, data, etc.

---

**A4.**

**Answer:** C) NAC (Network Access Control)

**Explanation:**

NAC checks device health and enforces policies before allowing network access.

---

**A5.**

**Answer:** A) Incremental

**Explanation:**

Incremental backup captures only changes since the last full backup.

---

**A6.**

**Answer:** C) Physical

**Explanation:**

Biometric scanners are physical controls that authenticate users.

---

**A7.**

**Answer:** D) WPA3-Enterprise

**Explanation:**

WPA3-Enterprise is the most secure option for business wireless networks.

---

**A8.**

**Answer:** B) Security Awareness Training

**Explanation:**

Training users helps them recognize phishing attempts and avoid falling victim.

---

**A9.**

**Answer:** C) Transfer

**Explanation:**

Buying insurance transfers the financial risk to another party.

---

**A10.**

**Answer:** C) RBAC

**Explanation:**

Role-Based Access Control (RBAC) assigns permissions based on user job roles.

# Questions 11–20

**Q11.**

Which term describes an attack where an unauthorized device connects to a corporate wireless network?

- A) Rogue AP
  - B) Evil Twin
  - C) Bluejacking
  - D) MAC Spoofing
- 

**Q12.**

What type of malware disguises itself as a legitimate program but delivers a malicious payload?

- A) Worm
  - B) Ransomware
  - C) Trojan
  - D) Rootkit
- 

**Q13.**

Which process helps ensure that only needed ports and services are running on a server?

- A) Network segmentation
  - B) Baseline configuration
  - C) Change management
  - D) Hardening
- 

**Q14.**

A database administrator is setting access so that users only have permission to view certain data. Which principle is being applied?

- A) Separation of Duties
- B) Need-to-Know
- C) Non-repudiation
- D) Risk Transference



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**Q15.**

Which option BEST describes a warm site in disaster recovery planning?

- A) Fully operational copy of the production environment
  - B) Facility with basic hardware but not real-time data
  - C) Empty building with power and Internet only
  - D) Vendor-provided cloud backup solution
- 

**Q16.**

Which technology would a company use to detect unauthorized changes to critical system files?

- A) DLP
  - B) File Integrity Monitoring (FIM)
  - C) SIEM
  - D) HIDS
- 

**Q17.**

A phishing attack led to a ransomware infection. Which two controls would have BEST prevented the incident? (Choose two.)

- A) Data Encryption
  - B) Email Filtering
  - C) Security Awareness Training
  - D) RAID 5
- 

**Q18.**

Which type of access control is enforced by system policies rather than user discretion?

- A) DAC
  - B) RBAC
  - C) ABAC
  - D) MAC
- 

**Q19.**

What is the primary purpose of a honeypot?

- A) Encrypt sensitive data
  - B) Divert attackers away from real systems
  - C) Patch vulnerabilities
  - D) Enforce firewall rules
- 

**Q20.**

Which incident response phase involves learning lessons and updating the incident response plan after a security event?

- A) Detection
  - B) Containment
  - C) Recovery
  - D) Lessons Learned
- 

## Answers 11–20

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**A11.**

**Answer:** B) Evil Twin

**Explanation:**

An evil twin is a rogue Wi-Fi access point set up to mimic a legitimate network.

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**A12.**

**Answer:** C) Trojan

**Explanation:**

A trojan appears legitimate but delivers malicious code once executed.

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**A13.**

**Answer:** D) Hardening

**Explanation:**

Hardening reduces attack surface by disabling unnecessary services.

---

**A14.**

**Answer:** B) Need-to-Know

**Explanation:**

Need-to-know restricts data access to only necessary users.

---

**A15.**

**Answer:** B) Facility with basic hardware but not real-time data

**Explanation:**

Warm sites have equipment ready but need configuration and data loading.

---

**A16.**

**Answer:** B) File Integrity Monitoring (FIM)

**Explanation:**

FIM detects unauthorized changes to files.

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**A17.**

**Answer:** B) Email Filtering and C) Security Awareness Training

**Explanation:**

Filtering blocks phishing emails; training teaches users to recognize them.

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**A18.**

**Answer:** D) MAC

**Explanation:**

Mandatory Access Control (MAC) strictly enforces security policies.

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**A19.**

**Answer:** B) Divert attackers away from real systems

**Explanation:**

Honeypots attract attackers to fake systems to study them.

---

**A20.**

**Answer:** D) Lessons Learned

**Explanation:**

Post-incident analysis improves future responses.

# Questions 21–30

**Q21.**

Which of the following BEST describes a risk mitigation strategy?

- A) Ignoring a low-probability event
  - B) Purchasing cyber insurance
  - C) Installing a firewall to block threats
  - D) Documenting a risk acceptance form
- 

**Q22.**

An attacker is trying multiple passwords against many different user accounts. What is this called?

- A) Dictionary Attack
  - B) Brute Force Attack
  - C) Password Spraying
  - D) Rainbow Table Attack
- 

**Q23.**

What is the purpose of a disaster recovery plan (DRP)?

- A) Prevent data breaches
  - B) Maintain operations during an attack
  - C) Restore critical business systems after disruption
  - D) Identify vulnerabilities before attacks occur
- 

**Q24.**

Which concept ensures that sensitive data is only accessible to authorized individuals?

- A) Integrity
  - B) Confidentiality
  - C) Availability
  - D) Authentication
-

**Q25.**

Which of the following BEST describes a vulnerability scanner?

- A) Blocks malicious traffic at the network perimeter
  - B) Actively exploits vulnerabilities
  - C) Passively identifies potential weaknesses
  - D) Encrypts sensitive communications
- 

**Q26.**

Which of the following technologies uses security groups and microsegmentation to enhance cloud security?

- A) VPNs
  - B) Infrastructure as Code
  - C) Cloud-native firewalls
  - D) Software-Defined Networking (SDN)
- 

**Q27.**

A system administrator wants to monitor failed login attempts centrally. Which system should be deployed?

- A) SIEM
  - B) NAC
  - C) DLP
  - D) SOAR
- 

**Q28.**

Which attack occurs when a malicious actor manipulates a DNS server to redirect traffic to fraudulent websites?

- A) DNS Poisoning
  - B) Domain Hijacking
  - C) IP Spoofing
  - D) ARP Poisoning
- 

**Q29.**

A company requires users to authenticate once and then have access to multiple systems without re-entering credentials. Which solution BEST meets this requirement?

- A) Federation
  - B) LDAP
  - C) Multifactor Authentication
  - D) VPN
- 

**Q30.**

Which backup strategy would provide the QUICKEST recovery time in case of a server failure?

- A) Full Backup
  - B) Differential Backup
  - C) Incremental Backup
  - D) Snapshot Backup
- 

## Answers 21–30

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**A21.**

**Answer:** C) Installing a firewall to block threats

**Explanation:**

Mitigation adds controls to reduce risk likelihood or impact.

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**A22.**

**Answer:** C) Password Spraying

**Explanation:**

Password spraying tries common passwords across many accounts to avoid lockout.

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**A23.**

**Answer:** C) Restore critical business systems after disruption

**Explanation:**

DRP focuses on system recovery after disaster events.

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**A24.**

**Answer:** B) Confidentiality

**Explanation:**

Confidentiality ensures sensitive data isn't disclosed to unauthorized users.

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**A25.**

**Answer:** C) Passively identifies potential weaknesses

**Explanation:**

Vulnerability scanners find weaknesses but don't exploit them.

---

**A26.**

**Answer:** D) Software-Defined Networking (SDN)

**Explanation:**

SDN uses segmentation and programmable security in cloud environments.

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**A27.**

**Answer:** A) SIEM

**Explanation:**

SIEM collects and analyzes logs, including login failures.

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**A28.**

**Answer:** A) DNS Poisoning

**Explanation:**

DNS poisoning manipulates DNS to redirect users to malicious sites.

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**A29.**

**Answer:** A) Federation

**Explanation:**

Federation allows single authentication across multiple domains or systems.

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**A30.**

**Answer:** D) Snapshot Backup

**Explanation:**

Snapshots allow rapid rollback to a known good system state.

# Questions 31–40

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**Q31.**

Which principle ensures that users are granted only the access necessary to perform their job functions?

- A) Separation of Duties
  - B) Need-to-Know
  - C) Least Privilege
  - D) Role-Based Access Control
- 

**Q32.**

An attacker captures data from a public Wi-Fi network without connecting to it. Which attack is being performed?

- A) Evil Twin
  - B) On-Path Attack (MITM)
  - C) Passive Eavesdropping
  - D) Session Hijacking
- 

**Q33.**

What is the PRIMARY goal of a business impact analysis (BIA)?

- A) Identify and prioritize critical business functions
  - B) Analyze threats against network security
  - C) Determine security control effectiveness
  - D) Perform a penetration test
- 

**Q34.**

What type of backup method would you use if you want to store only the changes made since the last full backup AND you want fast recovery?

- A) Incremental
- B) Full
- C) Differential
- D) Snapshot

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**Q35.**

Which of the following technologies BEST protects against on-path (Man-in-the-Middle) attacks?

- A) VLAN
  - B) IPS
  - C) VPN
  - D) RAID
- 

**Q36.**

During which incident response phase would you isolate a compromised server?

- A) Recovery
  - B) Containment
  - C) Lessons Learned
  - D) Identification
- 

**Q37.**

What security principle is enforced when employees are required to use two different passwords for administrative and non-administrative accounts?

- A) Separation of Duties
  - B) Least Privilege
  - C) Defense in Depth
  - D) Dual Control
- 

**Q38.**

Which cloud model allows the customer the MOST control over the operating system and applications?

- A) SaaS
  - B) PaaS
  - C) IaaS
  - D) FaaS
-

**Q39.**

What is a PRIMARY security concern with Infrastructure as Code (IaC)?

- A) Outdated server hardware
  - B) Rapid spread of misconfigurations
  - C) Vendor lock-in
  - D) Poor network performance
- 

**Q40.**

An attacker sends unsolicited Bluetooth messages to nearby devices. What attack is this?

- A) Bluesnarfing
  - B) Bluebugging
  - C) Bluejacking
  - D) Bluespoofing
- 

## Answers 31–40

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**A31.**

**Answer:** C) Least Privilege

**Explanation:**

Least privilege gives users only necessary access rights to do their jobs.

---

**A32.**

**Answer:** C) Passive Eavesdropping

**Explanation:**

Passive eavesdropping listens to network traffic without active interception.

---

**A33.**

**Answer:** A) Identify and prioritize critical business functions

**Explanation:**

BIA identifies essential processes and their recovery priorities.

---

**A34.****Answer:** C) Differential**Explanation:**

Differential backups capture changes since last full backup and restore faster than incremental.

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**A35.****Answer:** C) VPN**Explanation:**

VPNs encrypt traffic, preventing interception and tampering in on-path attacks.

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**A36.****Answer:** B) Containment**Explanation:**

Containment limits the spread of the incident, like isolating a server.

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**A37.****Answer:** A) Separation of Duties**Explanation:**

Separating credentials for admin and user accounts supports separation of duties.

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**A38.****Answer:** C) IaaS**Explanation:**

In Infrastructure as a Service (IaaS), the customer manages OS, apps, and configurations.

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**A39.**

**Answer:** B) Rapid spread of misconfigurations

**Explanation:**

IaC errors can quickly replicate insecure settings across environments.

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**A40.**

**Answer:** C) Bluejacking

**Explanation:**

Bluejacking involves sending unsolicited Bluetooth messages to devices.

## Questions 41–50

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### Q41.

Which of the following BEST describes a cold site?

- A) Operational data center ready for immediate use
  - B) Empty facility with basic infrastructure like power and HVAC
  - C) Fully equipped center with real-time data replication
  - D) Offsite cloud backup provider
- 

### Q42.

Which access control method enforces strict policies based on security labels such as “Confidential” or “Top Secret”?

- A) DAC
  - B) RBAC
  - C) MAC
  - D) ABAC
- 

### Q43.

An employee plugs a personal USB drive into a company workstation without approval. What risk does this primarily represent?

- A) Insider Threat
  - B) Phishing Attack
  - C) Supply Chain Attack
  - D) Business Email Compromise
- 

### Q44.

Which protocol secures email communication by digitally signing and encrypting messages?

- A) TLS

- B) S/MIME
  - C) SSH
  - D) SSL
- 

**Q45.**

Which type of control is implementing a security awareness training program?

- A) Physical
  - B) Technical
  - C) Preventive
  - D) Administrative
- 

**Q46.**

What is the MOST appropriate tool to use when wanting to aggregate, correlate, and analyze logs from multiple systems?

- A) VPN
  - B) Firewall
  - C) SIEM
  - D) NAC
- 

**Q47.**

Which of the following would MOST help prevent unauthorized physical access to a data center?

- A) IDS
  - B) Biometric Access Controls
  - C) VPN
  - D) Anti-Malware
- 

**Q48.**

What security concept involves separating services and functions into isolated containers to minimize the attack surface?

- A) Microsegmentation
- B) Defense in Depth
- C) Least Privilege
- D) Data Sovereignty



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**Q49.**

An attacker successfully tricks a user into giving up login credentials via a fake login page. What attack technique was used?

- A) Spear Phishing
  - B) Vishing
  - C) Smishing
  - D) Pharming
- 

**Q50.**

Which phase of the incident response process involves finding and removing malware from infected systems?

- A) Preparation
  - B) Containment
  - C) Eradication
  - D) Lessons Learned
- 

## Answers 41–50

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**A41.**

**Answer:** B) Empty facility with basic infrastructure like power and HVAC

**Explanation:**

A cold site is ready with essentials but needs equipment and data to become operational.

---

**A42.**

**Answer:** C) MAC

**Explanation:**

Mandatory Access Control uses labels like “Top Secret” to strictly control access.

---

**A43.**

**Answer:** A) Insider Threat

**Explanation:**

Unauthorized devices plugged into company systems pose insider risks.

---

**A44.**

**Answer:** B) S/MIME

**Explanation:**

S/MIME secures email with digital signatures and encryption.

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**A45.**

**Answer:** D) Administrative

**Explanation:**

Security training programs are administrative controls (policy/procedure related).

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**A46.**

**Answer:** C) SIEM

**Explanation:**

A SIEM collects and analyzes logs from across the enterprise.

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**A47.**

**Answer:** B) Biometric Access Controls

**Explanation:**

Biometrics (like fingerprints) are effective physical security measures.

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**A48.**

**Answer:** A) Microsegmentation

**Explanation:**

Microsegmentation isolates workloads to minimize lateral movement risk.

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**A49.**

**Answer:** A) Spear Phishing

**Explanation:**

Spear phishing targets individuals with highly customized fake login pages.

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**A50.**

**Answer:** C) Eradication

**Explanation:**

Eradication is when you remove malware or vulnerabilities after containment.

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## Questions 51–60

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### Q51.

Which security tool uses signatures and anomaly detection to identify malicious network traffic?

- A) Firewall
  - B) SIEM
  - C) IDS
  - D) DLP
- 

### Q52.

A company wants to ensure that employees can recover their files after a ransomware attack without paying the ransom. Which control BEST achieves this?

- A) IDS
  - B) Regular Offline Backups
  - C) VPN Access
  - D) Email Filtering
- 

### Q53.

Which of the following is MOST critical to maintain when preserving digital evidence?

- A) Full Disk Encryption
  - B) Legal Hold
  - C) Chain of Custody
  - D) Incident Triage
- 

### Q54.

A company configures a cloud storage bucket and mistakenly leaves it open to the public. What type of vulnerability is this?

- A) Zero-Day

- B) Misconfiguration
  - C) Insider Threat
  - D) Malware Infection
- 

**Q55.**

Which layer of the OSI model does a firewall operate primarily at?

- A) Application
  - B) Transport
  - C) Network
  - D) Data Link
- 

**Q56.**

What security concept is enforced when two employees are required to approve a wire transfer above a certain dollar amount?

- A) Dual Control
  - B) Least Privilege
  - C) Discretionary Access Control
  - D) Federation
- 

**Q57.**

Which cryptographic concept is used to ensure message integrity?

- A) Symmetric Encryption
  - B) Asymmetric Encryption
  - C) Hashing
  - D) Key Exchange
- 

**Q58.**

What is the purpose of tokenization in data security?

- A) Encrypt sensitive data
  - B) Replace sensitive data with non-sensitive placeholders
  - C) Hash sensitive data
  - D) Create a secure communication channel
-

**Q59.**

Which type of backup provides the FASTEST full system recovery after a catastrophic failure?

- A) Incremental
  - B) Full Backup
  - C) Differential
  - D) Cloud Backup
- 

**Q60.**

A team uses a sandbox environment to open suspicious files. What type of control is this?

- A) Preventive
  - B) Detective
  - C) Corrective
  - D) Compensating
- 

## Answers 51–60

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**A51.**

**Answer:** C) IDS

**Explanation:**

An IDS detects threats by matching signatures or identifying anomalies.

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**A52.**

**Answer:** B) Regular Offline Backups

**Explanation:**

Offline backups protect against ransomware by providing safe recovery data.

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**A53.**

**Answer:** C) Chain of Custody

**Explanation:**

Chain of custody ensures evidence integrity for legal use.

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**A54.****Answer:** B) Misconfiguration**Explanation:**

Leaving a cloud bucket public is a classic misconfiguration vulnerability.

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**A55.****Answer:** C) Network**Explanation:**

Firewalls operate mainly at Layer 3 (Network layer) — managing IP addresses and traffic.

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**A56.****Answer:** A) Dual Control**Explanation:**

Dual control requires two people to authorize a sensitive action.

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**A57.****Answer:** C) Hashing**Explanation:**

Hashing ensures data integrity by generating a fixed fingerprint of data.

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**A58.****Answer:** B) Replace sensitive data with non-sensitive placeholders**Explanation:**

Tokenization replaces real data with fake tokens to protect sensitive information.

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**A59.****Answer:** B) Full Backup

**Explanation:**

Full backups allow the quickest recovery without relying on incremental data restoration.

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**A60.****Answer:** A) Preventive**Explanation:**

Sandboxes are preventive, isolating suspicious files before damage can occur.



## Questions 61–70

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### Q61.

Which of the following is a PRIMARY characteristic of a rootkit?

- A) Encrypts files and demands ransom
  - B) Hides its existence by manipulating the OS
  - C) Replicates itself across the network
  - D) Sends unsolicited messages via Bluetooth
- 

### Q62.

An organization wants to minimize data loss during a disaster. Which metric defines the maximum amount of data loss acceptable?

- A) RTO
  - B) MTD
  - C) RPO
  - D) ALE
- 

### Q63.

Which wireless security protocol is considered obsolete and should NOT be used?

- A) WPA2
  - B) WPA
  - C) WPA3
  - D) WEP
- 

### Q64.

A system administrator is deploying security patches to all systems automatically after

testing. This is an example of:

- A) Change Management
  - B) Patch Management
  - C) Hardening
  - D) Incident Response
- 

**Q65.**

What type of malware restricts access to a system until payment is made?

- A) Trojan
  - B) Worm
  - C) Spyware
  - D) Ransomware
- 

**Q66.**

Which term describes isolating different departments in a network to improve security?

- A) Subnetting
  - B) Virtualization
  - C) Network Segmentation
  - D) Packet Filtering
- 

**Q67.**

What concept does the principle of "never trust, always verify" relate to?

- A) VPN
  - B) Zero Trust
  - C) Single Sign-On
  - D) Role-Based Access Control
- 

**Q68.**

Which tool is specifically designed to discover vulnerabilities in a system but NOT exploit them?

- A) Penetration Test
- B) Exploit Framework
- C) Vulnerability Scanner
- D) SIEM

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**Q69.**

An employee receives a fake call pretending to be IT support asking for a password. What attack is this?

- A) Phishing
  - B) Vishing
  - C) Smishing
  - D) Spear Phishing
- 

**Q70.**

A user logs into an internal website using a badge and PIN. What authentication factors are being used?

- A) Something you know and something you are
  - B) Something you know and something you have
  - C) Something you have and something you are
  - D) Two instances of something you know
- 

## Answers 61–70

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**A61.**

**Answer:** B) Hides its existence by manipulating the OS

**Explanation:**

Rootkits hide their presence by modifying OS functions to avoid detection.

---

**A62.**

**Answer:** C) RPO

**Explanation:**

Recovery Point Objective defines the maximum acceptable data loss.

---

**A63.**

**Answer:** D) WEP

**Explanation:**

WEP is outdated and insecure — easily cracked in minutes.

---

**A64.**

**Answer:** B) Patch Management

**Explanation:**

Patch management involves scheduling and deploying updates systematically.

---

**A65.**

**Answer:** D) Ransomware

**Explanation:**

Ransomware encrypts systems/files and demands payment for access.

---

**A66.**

**Answer:** C) Network Segmentation

**Explanation:**

Segmentation isolates different parts of the network for better control and security.

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**A67.**

**Answer:** B) Zero Trust

**Explanation:**

Zero Trust always requires verification, regardless of network location.

---

**A68.**

**Answer:** C) Vulnerability Scanner

**Explanation:**

Vulnerability scanners detect weaknesses without active exploitation.

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**A69.**

**Answer:** B) Vishing

**Explanation:**

Vishing is phishing conducted over the telephone.

---

**A70.**

**Answer:** B) Something you know and something you have

**Explanation:**

PIN = something you know; Badge = something you have.

## Questions 71–80

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### Q71.

Which technology allows secure remote access to a corporate network by encrypting all traffic?

- A) VLAN
  - B) IDS
  - C) VPN
  - D) Proxy Server
- 

### Q72.

An employee leaves a confidential document on a shared printer. What kind of risk is this?

- A) Insider Threat
  - B) Physical Security Risk
  - C) Supply Chain Risk
  - D) Malware Infection
- 

### Q73.

Which of the following would MOST effectively prevent malware from executing on endpoints?

- A) Application Allowlisting
- B) IDS Deployment
- C) SSL/TLS Encryption
- D) Role-Based Access Control

---

**Q74.**

A company requires that users verify their identity using a username, password, and fingerprint scan. This is an example of:

- A) Multi-Factor Authentication
  - B) Federation
  - C) SSO
  - D) Kerberos Authentication
- 

**Q75.**

Which security principle ensures that critical functions are divided among multiple people to prevent fraud?

- A) Least Privilege
  - B) Separation of Duties
  - C) Job Rotation
  - D) Dual Control
- 

**Q76.**

What technique is used by attackers to overload a server with requests, causing service disruption?

- A) SQL Injection
  - B) DNS Poisoning
  - C) DDoS Attack
  - D) ARP Spoofing
- 

**Q77.**

Which of the following devices inspects and filters packets based on application-level data?

- A) Traditional Firewall
  - B) Proxy Server
  - C) Next-Generation Firewall (NGFW)
  - D) Router
-

**Q78.**

Which method ensures that a user cannot deny performing an action, such as sending an email?

- A) Non-Repudiation
  - B) Availability
  - C) Encryption
  - D) Role-Based Access Control
- 

**Q79.**

An attacker exploits a race condition in a web application. What is this an example of?

- A) Improper Input Handling
  - B) Application Logic Flaw
  - C) Secure Coding Practice
  - D) Race Attack Vulnerability
- 

**Q80.**

Which of the following is a benefit of implementing Infrastructure as Code (IaC) securely?

- A) Manual configuration of servers
  - B) Consistent and repeatable deployments
  - C) Physical separation of networks
  - D) Encrypted communication tunnels
- 

## Answers 71–80

---

**A71.**

**Answer:** C) VPN

**Explanation:**

A VPN encrypts data between remote users and corporate networks.

---



**A72.**

**Answer:** B) Physical Security Risk

**Explanation:**

Leaving sensitive documents in shared spaces risks unauthorized access.

---

**A73.**

**Answer:** A) Application Allowlisting

**Explanation:**

Only approved apps can run, blocking unknown malware.

---

**A74.**

**Answer:** A) Multi-Factor Authentication

**Explanation:**

Using two or more different authentication types (password + fingerprint).

---

**A75.**

**Answer:** B) Separation of Duties

**Explanation:**

No one person controls all parts of a critical process, preventing fraud.

---

**A76.**

**Answer:** C) DDoS Attack

**Explanation:**

Distributed Denial of Service floods a server with traffic.

---

**A77.**

**Answer:** C) Next-Generation Firewall (NGFW)

**Explanation:**

NGFWs inspect packets deeply, including application-level data.

---

**A78.**

**Answer:** A) Non-Repudiation

**Explanation:**

Non-repudiation ensures proof of actions like sending emails.

---

**A79.**

**Answer:** D) Race Attack Vulnerability

**Explanation:**

Race conditions exploit timing issues in applications.

---

**A80.**

**Answer:** B) Consistent and repeatable deployments

**Explanation:**

IaC enables secure, automated, consistent infrastructure setup.

## Questions 81–90

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### Q81.

Which of the following BEST describes the primary benefit of implementing a SIEM system?

- A) Blocking unauthorized access attempts
  - B) Preventing malware infections
  - C) Aggregating and analyzing security logs centrally
  - D) Encrypting sensitive data at rest
- 

### Q82.

What is the MAIN purpose of a DLP (Data Loss Prevention) system?

- A) Detect malware signatures
  - B) Monitor unauthorized data transfers
  - C) Block phishing emails
  - D) Scan networks for vulnerabilities
- 

### Q83.

An attacker tricks a user into resetting their password by spoofing a legitimate password reset page. What kind of attack is this?

- A) Phishing
- B) SQL Injection

- C) Session Hijacking
  - D) Privilege Escalation
- 

**Q84.**

Which backup method copies only the files that have changed since the last backup, no matter what type it was?

- A) Full
  - B) Incremental
  - C) Differential
  - D) Snapshot
- 

**Q85.**

What does the principle of Defense in Depth emphasize?

- A) Using multiple layers of security controls
  - B) Deploying only firewalls at the network perimeter
  - C) Using two-factor authentication for all logins
  - D) Relying primarily on SIEM alerts
- 

**Q86.**

Which of the following is an example of an administrative control?

- A) Fire extinguisher in server room
  - B) Firewall rules
  - C) Security awareness policy
  - D) Encryption of data at rest
- 

**Q87.**

A SOC analyst notices large outbound traffic to an unknown IP. What is the BEST immediate action?

- A) Shut down all network switches
  - B) Disconnect affected systems
  - C) Reboot affected systems
  - D) Call the ISP
-

**Q88.**

Which term describes unauthorized commands sent from a user's browser to a trusted website?

- A) Cross-Site Scripting (XSS)
  - B) SQL Injection
  - C) Command Injection
  - D) Cross-Site Request Forgery (CSRF)
- 

**Q89.**

Which of the following technologies enables a single identity to access multiple applications across different domains?

- A) Multifactor Authentication
  - B) Federation
  - C) VPN
  - D) Zero Trust
- 

**Q90.**

What is the FIRST action to take when you detect an active ransomware infection?

- A) Pay the ransom
  - B) Disconnect infected systems from the network
  - C) Run antivirus scan
  - D) Contact cloud backup provider
- 

## Answers 81–90

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**A81.**

**Answer:** C) Aggregating and analyzing security logs centrally

**Explanation:**

SIEM systems collect logs from multiple sources for centralized analysis.

---

**A82.**

**Answer:** B) Monitor unauthorized data transfers

**Explanation:**

DLP systems prevent sensitive data from leaving the network.

---

**A83.**

**Answer:** A) Phishing

**Explanation:**

Spoofed password reset pages are classic phishing attacks.

---

**A84.**

**Answer:** B) Incremental

**Explanation:**

Incremental backups save changes since the last backup (full or incremental).

---

**A85.**

**Answer:** A) Using multiple layers of security controls

**Explanation:**

Defense in Depth means no single point of failure.

---

**A86.**

**Answer:** C) Security awareness policy

**Explanation:**

Administrative controls include policies and procedures.

---

**A87.**

**Answer:** B) Disconnect affected systems

**Explanation:**

Disconnect immediately to prevent further data exfiltration.

---

**A88.**

**Answer:** D) Cross-Site Request Forgery (CSRF)

**Explanation:**

CSRF tricks users into executing unwanted actions.

---

**A89.**

**Answer:** B) Federation

**Explanation:**

Federation allows single login across multiple organizations/systems.

---

**A90.**

**Answer:** B) Disconnect infected systems from the network

**Explanation:**

Isolate first to stop the spread of ransomware.

## Questions 91–100

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### Q91.

Which of the following terms describes preventing unauthorized access by forcing a user to authenticate again after a period of inactivity?

- A) Session Lock
  - B) Password Complexity
  - C) Single Sign-On
  - D) Federation
- 

### Q92.

What type of test involves assessing the physical, administrative, and technical safeguards without exploiting vulnerabilities?

- A) Vulnerability Scan
  - B) Penetration Test
  - C) Risk Assessment
  - D) Business Impact Analysis
- 

### Q93.

Which component is critical for ensuring confidentiality when sending sensitive data across the Internet?

- A) Hashing
- B) Encryption
- C) Load Balancing
- D) IDS



---

**Q94.**

What is the purpose of implementing redundant power supplies in servers?

- A) Improve encryption performance
  - B) Increase network bandwidth
  - C) Enhance system availability
  - D) Provide faster processing
- 

**Q95.**

Which of the following MOST accurately defines tokenization?

- A) Encrypting all data in a database
  - B) Replacing sensitive data elements with a unique identifier
  - C) Hashing user passwords before storage
  - D) Obfuscating source code to protect intellectual property
- 

**Q96.**

An attacker uses a vulnerability in a software program that has not yet been patched.  
What kind of attack is this?

- A) Zero-Day
  - B) Man-in-the-Middle
  - C) Cross-Site Scripting
  - D) Phishing
- 

**Q97.**

What is the BEST method to mitigate the impact of social engineering attacks?

- A) Install firewalls
  - B) Security Awareness Training
  - C) Regular Penetration Testing
  - D) Conduct Full Backups
- 

**Q98.**

Which type of malware is specifically designed to provide persistent, hidden access to a compromised system?

- A) Ransomware
  - B) Trojan
  - C) Rootkit
  - D) Worm
- 

**Q99.**

A backup strategy uses the Grandfather-Father-Son method. What is this primarily designed to achieve?

- A) Ensure zero data loss
  - B) Maintain multiple historical versions of backups
  - C) Accelerate disaster recovery
  - D) Improve real-time replication
- 

**Q100.**

What security tool intercepts and controls traffic between a user and the Internet to enforce company policies?

- A) Firewall
  - B) VPN
  - C) Proxy Server
  - D) Load Balancer
- 

## Answers 91–100

---

**A91.**

**Answer:** A) Session Lock

**Explanation:**

Session locks require reauthentication after inactivity to prevent unauthorized access.

---

**A92.**

**Answer:** C) Risk Assessment

**Explanation:**

Risk assessments evaluate safeguards without actively exploiting vulnerabilities.

---

**A93.****Answer:** B) Encryption**Explanation:**

Encryption protects data confidentiality during transmission.

---

**A94.****Answer:** C) Enhance system availability**Explanation:**

Redundant power supplies help keep servers running during power failures.

---

**A95.****Answer:** B) Replacing sensitive data elements with a unique identifier**Explanation:**

Tokenization swaps real data for safe, meaningless tokens.

---

**A96.****Answer:** A) Zero-Day**Explanation:**

Zero-day attacks exploit unknown or unpatched vulnerabilities.

---

**A97.****Answer:** B) Security Awareness Training**Explanation:**

Training users helps them recognize and avoid social engineering.

---

**A98.****Answer:** C) Rootkit

**Explanation:**

Rootkits maintain hidden, persistent access by deeply integrating with systems.

---

**A99.****Answer:** B) Maintain multiple historical versions of backups**Explanation:**

Grandfather-Father-Son rotation ensures backup version history.

---

**A100.****Answer:** C) Proxy Server**Explanation:**

Proxies filter, control, and log user Internet traffic to enforce policies.